PAC room machine (speaker) V, and a Noise source VI. Each of the parts II, III, and IV are in the CRCP 105b.

The noise signal A which is synchronized with the frequency of the voltage sensing part I is output through the Noise source VI. The signal A is expressed by $A = \sin(\omega_0 + \alpha)t$.

The signal A with a rating voltage (220V or 110V) is decreased by the resistance of resistors R1 and R2 of the signal decreasing part II and is inputted into the bandpass filter part III.

In the bandpass filter part III, the inputted signal passes through a first bandpass filter, an op amp and a second bandpass filter, and a reverse signal having the opposite phase from the inputted signal is output.

This reversed signal is amplified by the power amp part IV and output through the speaker V as a signal B. ($B = \sin\omega_0 t$, B being the reverse signal of A.)

The signal A is offset by the signal B. The noise signal A corresponds to said signal X(k) and the reverse signal B corresponds to said signal Y(k).

Therefore, the signals A and B are mixed to be the residual noise signal E(k). CRCP 105b outputs the reverse signal B of E(k) inputted therein. Such process goes on to decrease the value of E(k), so that the value of E(k) approaches zero.

In FIG. 10, B represents the noise and A represents the canceling noise. Mathematically, the relationship is as follows:

If B = $\sin\omega_0 t$ then A = $\sin(\omega_0 + \alpha)t$

such that A + B = $\sin(\omega_0 + \alpha)t + \sin\omega_0 t \approx 0$

where $-180° \leq \alpha \leq 180°$. --

Please **insert the following on page 8, after line 17**:

-- In Fig. 7, CRCP 105b outputs the reverse signal Y(k) of the inputted signal X(k). The signal Y(k) and the signal X(k) passed through system 105a are mixed in mixer 105c. The residual noise signal E(k) (E(k)=X(k)-Y(k)) output from mixer 105c is inputted to CRCP 105b. CRCP 105b outputs the reverse signal Y(k) of E(k) inputted therein. Y(k) is a function of X(k) and E(k)). This process goes on to decrease the value of E(k). The amplitude of the inputted signal is determined by the equation $\Delta E(k)=E(k)-E(k-1)$. --

Please **insert the following on page 9, after line 3**:

-- In Fig. 7, CRCP 105b performs processing procedures not shown in the drawings. CRCP 105b stores the prior residual noise signal E(k-1) and the residual noise signal E(k) calculated from mixer (105c) and calculates an error variation signal $\Delta E(k)$ by an equation, $\Delta E(k)=E(k)-E(k-1)$ CRCP 105b successively stores the residual noise signal. --